

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/080,844	02/22/2002	Chih M. Lin	10121-9840	9673	
23409 75	590 07/29/2003				
	EST & FRIEDRICH	EXAMINER			
	100 E WISCONSIN AVENUE MILWAUKEE, WI 53202			LIU, HAN L	
			ART UNIT	PAPER NUMBER	
			3746	7	
			DATE MAILED: 07/29/2003)	

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Applicati n No.	Applicant(s)				
	10/080,844	LIN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Han Lieh Liu	3746				
The MAILING DATE of this communication apperiod for Reply	pears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.	136(a). In no event, however, may a reply be ti	mely filed				
 If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). Status	will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	n the mailing date of this communication. ED (35 U.S.C. § 133).				
1)⊠ Responsive to communication(s) filed on 22	February 2002					
	nis action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disp sition of Claims						
4) Claim(s) 1-28 is/are pending in the application	n.	•				
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>13-23</u> is/are allowed.						
6)⊠ Claim(s) <u>1,4-9,24 and 28</u> is/are rejected.		÷ ÷				
7) Claim(s) 2,3,10-12 and 25-27 is/are objected to	to.					
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9) The specification is objected to by the Examine						
10)⊠ The drawing(s) filed on <u>22 February 2002</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on		oved by the Examiner.				
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. § 119(a	a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				

U.S. Patent and Trademark Office PTO-326 (Rev. 04-01) Application/Control Number: 10/080,844

Art Unit: 3746

DETAILED ACTION

Drawings

1. The drawings filed on 07/27/2001 are acceptable for examination subject to correction of the informalities indicated on the attached "Notice of Draftperson's Patent Drawing Review," PTO-948.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferlatte (USPN 5311090) and further in view of Tiberend (USPN 4521997).

With regard to claim 1, Ferlatte discloses an apparatus shown in Fig. 1 comprising: a driven element (15) including a housing (22) having an outer surface (26); a driving element (12) operably coupled to the driven element; and a shield (28) coupled to the driving element (12) such that the shield at least partially covers at least one of the driven element (15) and the driving element (12), the shield having an outer surface (not labeled), and the surface pattern of the driving element shield (28) is substantially similar to the outer surface (26) of the driven element (15). Ferlate discloses the surface patterns of the shield as being simple cylindrical as viewed from Fig. 2. Ferlate does not, however, discloses specifically that there are raised portion and

non-raised portion to make up the surface pattern. Tiberend discloses that shield (16) has raised portion and non-raised portion and is used to protect the object from inclement weather. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to advantageously select a corrugated surface pattern, i.e. with raised portion and non-raised portion, for the shield for providing longitudinal rigidity and still enabling the side edges of the shield to be flexed to vary the radius of curvature of the shield if needed.

With regard to claim 5, Ferlatte discloses the invention in base claim 1. Furthermore, Ferlatte discloses that the driving element (12) is an electric motor, column 3 line22.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferlatte (USPN 5311090) further in view of Tiberend (USPN 4521997) as applied to base claim 1 above and further in view of Murray (USPN 4631006).

Ferlatte, further in view of Tiberend, discloses the invention substantially as claimed in the base claim 1. Ferlatte, further in view of Tiberend, discloses a fan (15) is attached to the motor (12), Ferlatte does not disclose that a pump is the driven element. Murray discloses a pump/motor apparatus where the driving element is a motor, which is positioned in shield (10) and the driven element is the pump assembly (68). The selection of the driven element is the use and application of the apparatus, i.e. for providing circulating air or pumping fluid. Therefore, it would have been obvious to one having ordinary skill in the art of providing shield to an rotational element of the pump/motor apparatus at the time the invention was made to advantageously select pump to pump fluid as required by the end use of the application of the apparatus.

4. Claims 6 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferlatte (USPN 5311090) further in view of Tiberend (USPN 4521997) as applied to base claim 1 above and further in view of Meeks et al. (6093990).

Ferlatte, further in view of Tiberend, discloses the invention substantially as claimed in the base claim 1. Ferlatte, further in view of Tiberend, however, does not disclose a coupled conduit box to the shield. Meeks et al. disclose an apparatus shown in Figs 1-3 comprising: a conduit box (4) coupled to the motor, the conduit box having a base, (not labeled), at least one wall, and an open side defined by the wall and opposite the base; a shield (1) coupled to the conduit box and being sized to cover the open side of the conduit box and at least partially cover the motor. Meeks et al do disclose that the conduit box (4) is attached to the shield (1) by any suitable method, Abstract lines 9-10. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to advantageously couple a conduit box to the shield so that the electrical connection to the operation of the apparatus is also protected from adverse environmental conditions.

5. Claims 24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meeks et al. (6093990).

Meeks et al. disclose an apparatus shown in Figs 1-3 comprising: a motor (2); a conduit box (4) coupled to the motor, the conduit box having a base, (not labeled), at least one wall, and an open side defined by the wall and opposite the base; a shield (1) coupled to the conduit box and being sized to cover the open side of the conduit box and at least partially cover the motor.

Art Unit: 3746

Meeks et al., however, does not specifically disclose that the fastener, a screw, is the sole attachment. Meeks et al do disclose that the conduit box (4) is attached to the shield (1) by any suitable method, Abstract lines 9 - 10. Therefore, it would have been obvious to one having ordinary skill in the art of joining two structural members at the time the invention was made to advantageously use a screw as a fastener to quickly and easily couple two joining structural members, the shield and the conduit box.

Allowable Subject Matter

- 6. Claims 2, 3, 10 12 and 25 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. Claims 13 23 are allowed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Hirano et al. (USPN 6592336 B1), Davis et al. (USPN 6322326 B1), Goertzen (USPN 5378119), Murray et al. (USPN 5209653), Franz (USPN 5298824).

Hirano et al. disclose a hydraulic pump with a built-in electric motor wherein an electric motor and a pump unit are arranged in tandem fashion and accommodated within a common housing. In the pump, the housing is in the form of a metal box having a rectangular parallelepiped external shape and forms an electric motor frame fixedly accommodating a stator of the electric motor therein.

Application/Control Number: 10/080,844

Art Unit: 3746

Davis et al. disclose a modular condensate pump assembly. A removable support plate is supported on the collection tank and the support plate supports a pump extending into the collection tank. A cover, with mounting lip flange, encloses the motor/pump and the microswitches that control the pump operation.

Goertzen discloses an air compressor that includes an enclosed housing with an electric motor mounted to a bottom frame within the housing and a compressor pump located vertically above the motor within the housing and operably connected to the motor. A switch is mounted on the wall inside the housing.

Murray et al. disclose a vacuum pump that includes an electric motor and a pump module mounted to the motor housing with the motor shaft being rotatably coupled to a pumping mechanism within the pumping module. A conduit box is coupled to the motor shield.

Franz discloses a covering for electrical machine with at one film, which is placed around a motor pole housing and around parts attached to the housing and which is permanently shrunk onto the pole housing and the parts.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Han Lieh Liu whose telephone number is 703-305-0860. The examiner can normally be reached on Monday - Thursday 7:30 to 16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy S. Thorpe can be reached on 703-308-0102. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Application/Control Number: 10/080,844

Art Unit: 3746

Page 7

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0861.

Han Lieh Liu

July 24, 2003